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Parts, Materials, and Processes Management After Commercialization

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Outline

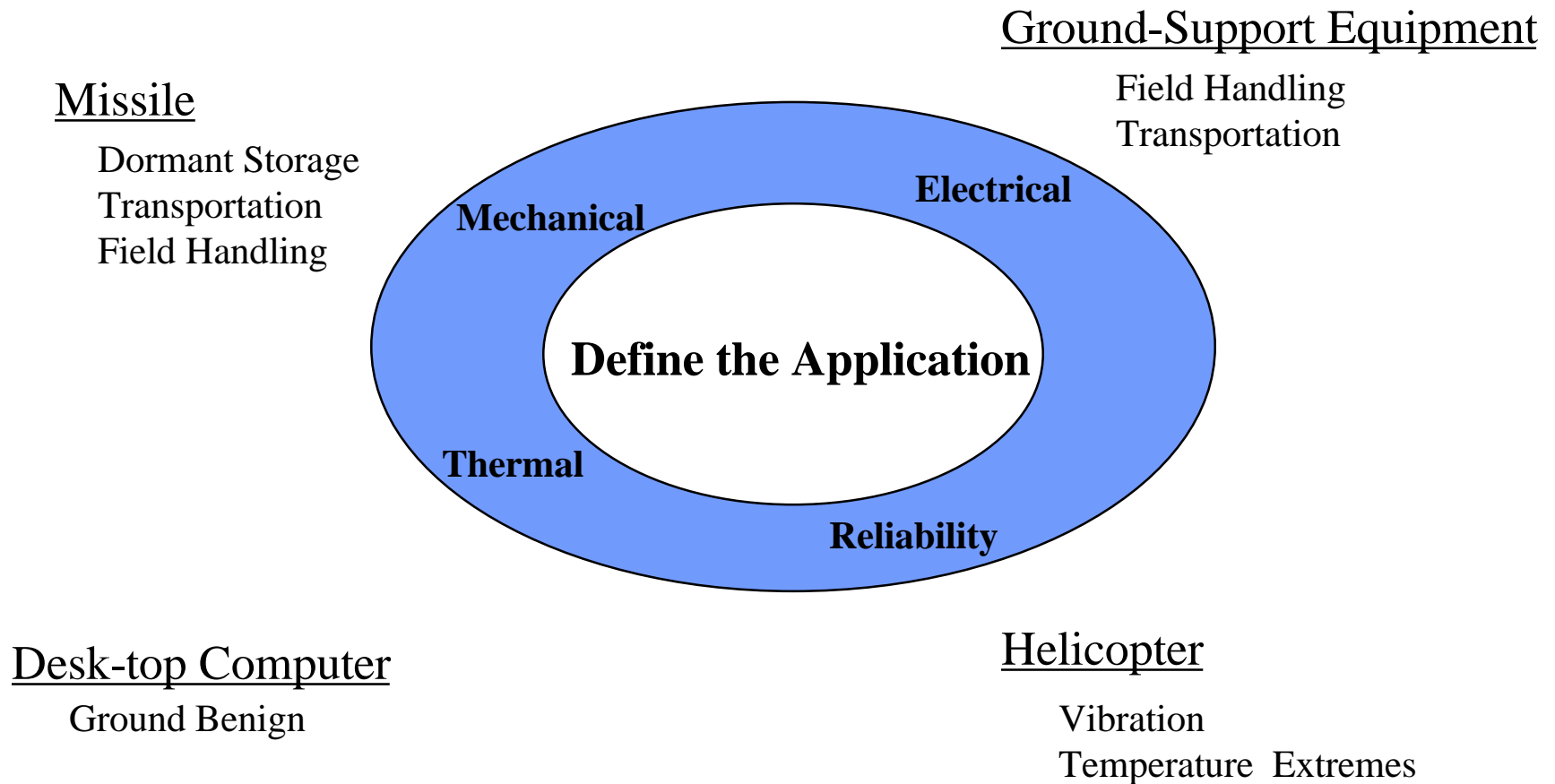
- Parts, Materials, and Processes Selection and Application
 - Application Definition
 - Life Cycle Cost
 - Vendor Management
 - Technology Characterization
- Contractual Implementation
- Product Assurance Role in Implementation Process



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PMP Selection and Application



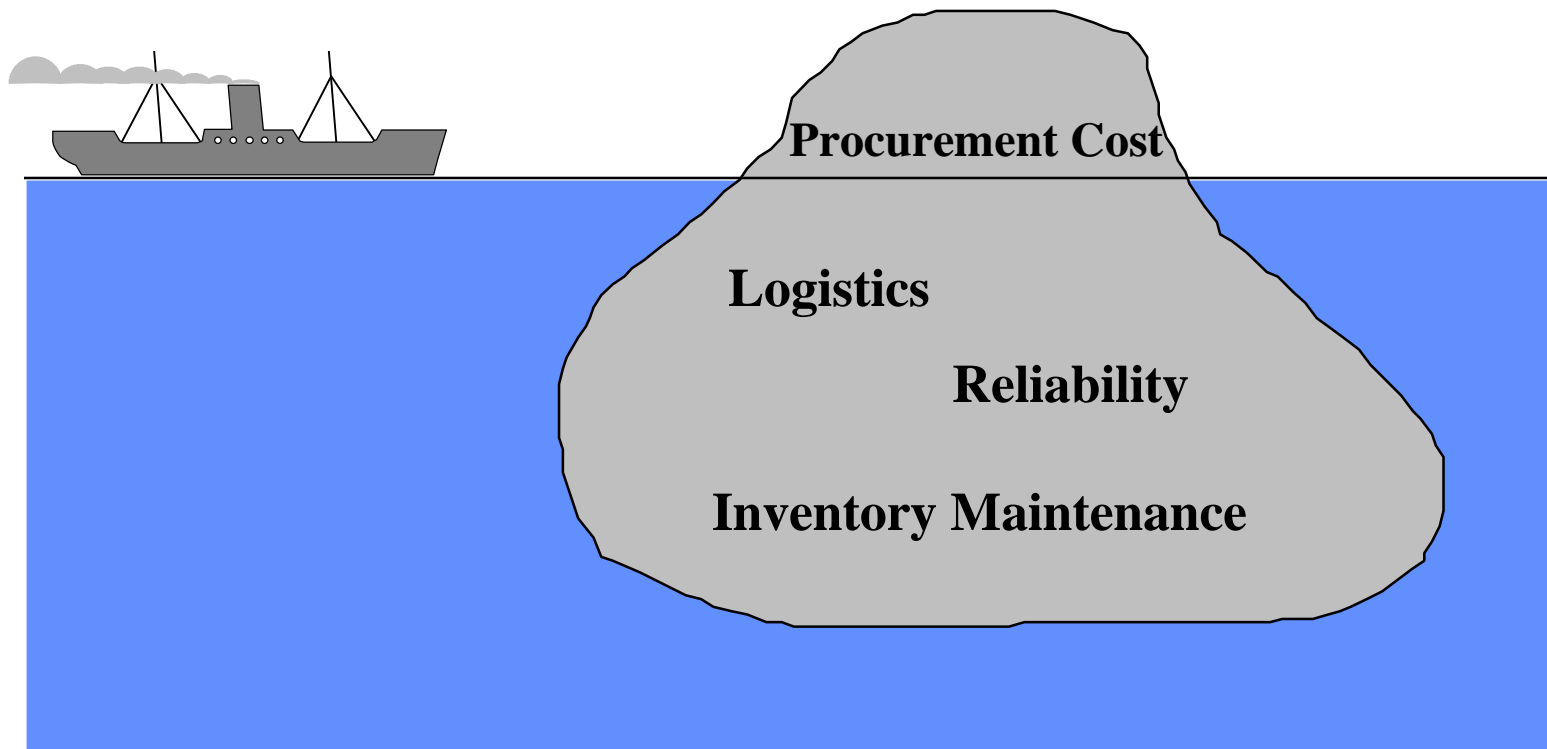


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PMP Selection and Application

Life Cycle Cost





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PMP Selection and Application

Vendor Management

- Audits
 - Understand manufacturing, QA, Reliability programs
 - Standard evaluation criteria (e.g., QML)
- Monitor Changes, Corrective Action, Reliability Data
- Business Plan
 - Strategic alliances
 - Standardization



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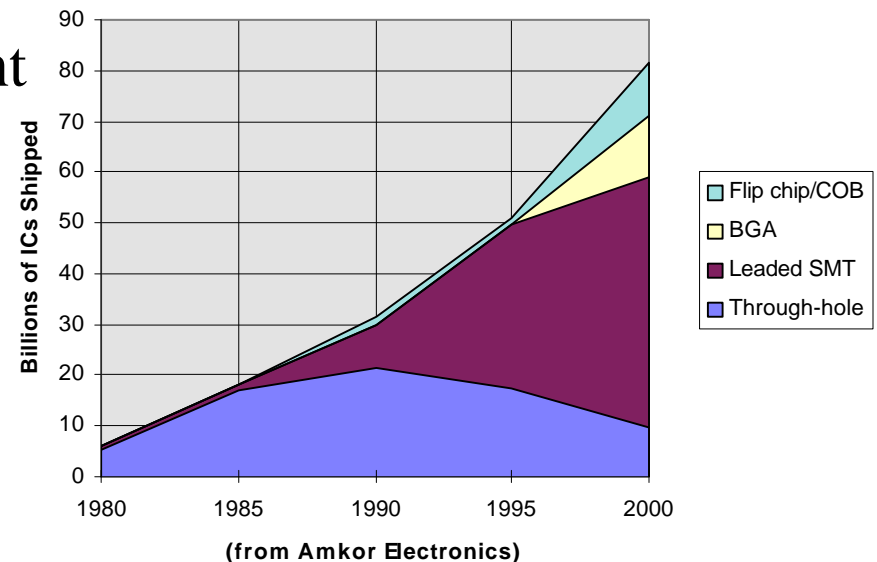


PMP Selection and Application

Technology Characterization

- Determine performance capability
- Evaluate reliability and quality assurance
- Proactive strategies
 - Obsolescence management
- Standardization
- Business plan

Microcircuit Packaging Trends





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PMP Selection and Application

Standardization

- Device Technology
- Performance/Process Capability
 - Performance Specifications
 - Qualified Manufacturers List
 - Standard Microcircuit Drawings
- Parts Management and Control
 - MIL-HDBK-965
 - AIAA R-100



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Parts Management Within the Design Process

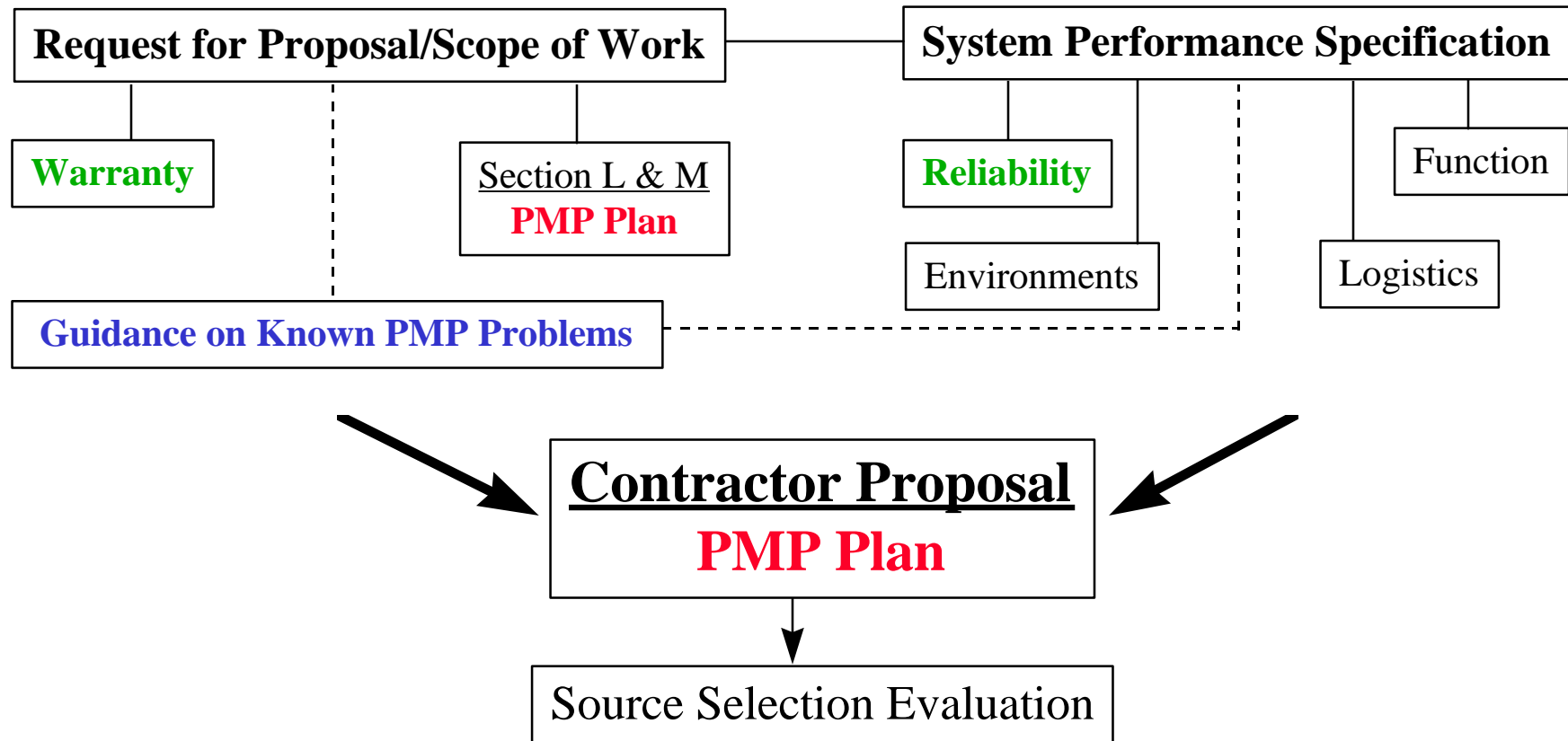
From AIAA R-100, Recommended Practice for Parts Management



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Contractual Implementation





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Product Assurance Role

Champion Best Practices for PMP through IPTs

- Broad Perspective on Best Practices/Industry Capabilities
- Independent Verification on PMP Reliability/Quality
- Electronic Packaging Technology Trends
- Physics of Failure Methodology
- Failure Analysis Techniques
- Lessons Learned for Missile Systems
- PMP Field Failure Database